

1827
An Inaugural Essay

sufficiently good - but
too many errors in
spelling - to be allowed. On

Erysipelatous Inflammation
for the degree
of

Doctor of Medicine
in the

University of Pennsylvania

by
John H. Stokes

New Jersey
Jan. 1828.

Copied. March 1828

to the General

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On
Erysipelatous Inflammation

The following observations on Erysipelatous Inflammation, are respectfully submitted to the examination, of the Medical Professors, of the University of Pennsylvania, accompanied by the sincere acknowledgments of the author, for the benefit he has received, from their instructions.

Philadelphia Jan. 4th

The
National Institute of Health

The National Institute of Health is a Federal Government agency that is responsible for the health of the Nation. It is the primary agency for the development and promotion of health care, and it is the primary agency for the development and promotion of health care. It is the primary agency for the development and promotion of health care, and it is the primary agency for the development and promotion of health care.

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On Erysipelatous Inflammation

This variety of inflammation appears to be a disease of very ancient date, for it is described by Hippocrates, and so far as my information extends, by most of the ancient writers.

Dr. Cullen has placed Erysipelas in the class Pyrexia, and order Exanthemata, of his nosological arrangement; but as it is almost always a constitutional affection, attended with fever, vomiting, &c. as it has many of the symptoms, and is found generally to yield to similar remedial measures, it is now generally admitted, that it more properly belongs to the order Phlegmasia. Dr. Cullen himself acknowledges, that ⁶⁰it seems doubtful if this disease be properly in nosology separated from the Phlegmasia ^{2d} and that in their nature

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they are very similar. Numerous opinions have been at different times offered, respecting the nature and origin of Erysipelas; the most popular of which was that of Hippocrates, who supposed the disease to depend upon a congestion of the bile. This theory was adopted by Galen, and many of the ancient physicians.

On the restoration of learning in the fifteenth century, the Galenic system was the only one known to the Physicians of the time, and as no one thought proper to hazard his reputation, by opposing what was then considered almost in the light of revelation, this system, and consequently the views to which it led, respecting the subject we are now considering, prevailed without opposition, until it was met by the Chemical system of Paracelsus.

Although the system of Paracelsus was received by many, the Galenists continued far more numerous, until the discovery of the circulation of the blood, the theories

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duct, and the receptacle of the chyle, about the middle of the seventeenth century, sealed the fate of this once celebrated system.

Several other systems have been proposed, which lead to different theories of Erysipelas, but they only tend to show, how widely wise men may differ in opinion, and how plausible a theory may be made to appear, which future discoveries prove to be, void of almost every thing but absurdity.

It was the opinion of Sydenham, and many other humoral pathologists, that Erysipelas depended upon an acrid, and commonly a bilious humour, diffused through the mass of the blood, and Dr Cullen appears to have entertained a similar opinion, for he says,

"I suppose the Erysipelas to depend upon a matter generated within the body, which is in consequence of fever, thrown out upon the surface of the body."

I do not presume to oppose the opinion of the venerable Cullen, but candour obliges me to acknowledge,

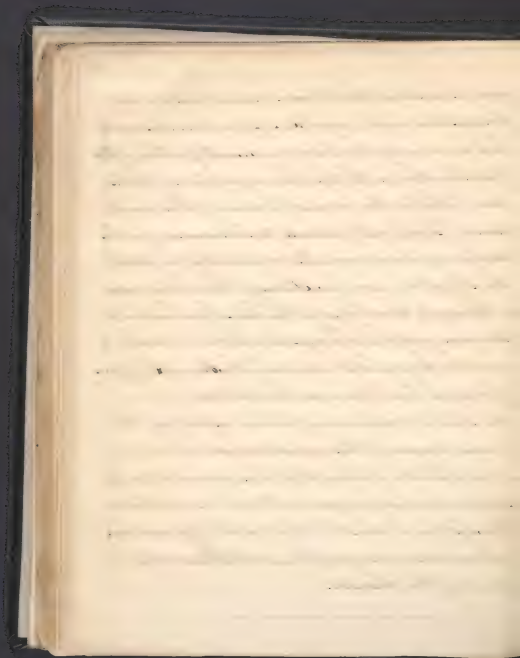
that I cannot comprehend, how a matter generated in the system, can in consequence of fever, be thrown upon the surface. I have always considered the fever attending Erysipelas as the effect of irritation, as a mere symptom of the disease, but it is here evidently considered the exciting cause.

We have then, (agreeably to this theory) a matter generated in the system; this matter produces a fever; and this fever, the result of the action of the foreign substance on the system, now becomes the active agent in expelling its own cause! what it is that first excites this matter to action, and causes it to produce the fever, we are left to conjecture.

The disease may be supposed to depend upon a noxious matter present in the system, producing, a peculiar susceptibility, of a particular organ or tissue. The individual being now exposed to cold, or some other exciting cause, this susceptible organ

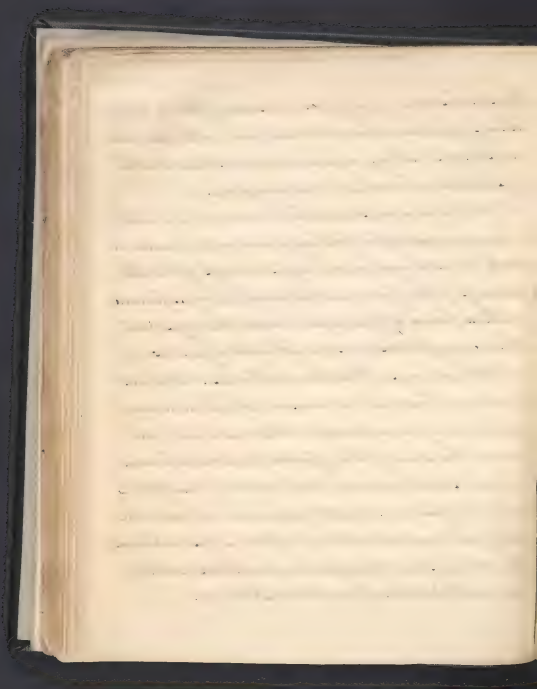
becomes irritated, the blood is intercepted in its progress, the whole vascular system becomes involved, producing that derangement of action called fever, together with the other symptoms of the disease. What is the *modus operandi* of this remote cause? I shall not pretend to determine; for this would require a minute acquaintance with the structure and functions of the body, and a thorough knowledge of the laws by which it is governed, and the changes to which it is subject, and this knowledge can only be obtained by years of careful practice and observation.

Nor shall I venture an opinion respecting the precise origin of this remote cause; but I cannot agree with Dr Gullen that it is generated in the system; for if a foreign matter be generated in the system, it must be the result of a morbid action, and consequently, is not the remote cause of the disease.



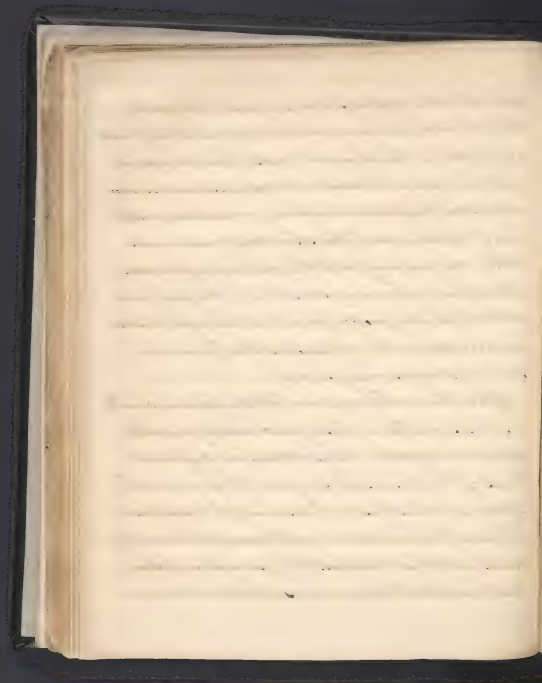
Erysipelas may be defined a disease of febrile action, always affecting some external part, with heat, redness and swelling, and in some instances with suppuration, ulceration, and gangrene.

It often comes on suddenly, commencing with a languid, distressed feeling, pain in the back and head, nausea and vomiting, shortness of breath, paleness of the face and extremities, accompanied with a livid appearance under the eyes, and these symptoms are soon followed by a sense of cold shiverings. After the chill has continued for some time, a fever comes on, which in many instances, is accompanied with considerable delirium. The skin of the affected part now assumes a bright scarlet colour, which entirely disappears when pressure is made upon it, but immediately returns when the pressure is discontinued; this colour soon changes to a livid red, interspersed with patches of a yellowish tinge.



Soon after the redness comes on, a smooth, glossy tumour with an irregular base, appears, and spreads gradually to the adjacent parts. This tumour is elastic, without tension or hardness, and communicates on pressure a crackling sensation, or species of crepitus, as if the skin had been burnt. When the face is affected, the patient experiences a prickling, or burning sensation, in the part, without much very acute pain; but when the disease is situated on the extremities, the pain is in some instances, very severe.

After the swelling is completely formed, small vesicles similar to those produced by a scald, appear to a greater or less extent, on different parts of the diseased surface; these generally appear in clusters, and discharge an acrid, serous fluid, which in some instances, excoriates the parts which it touches. They sometimes degenerate into troublesome ulcers, which continue to

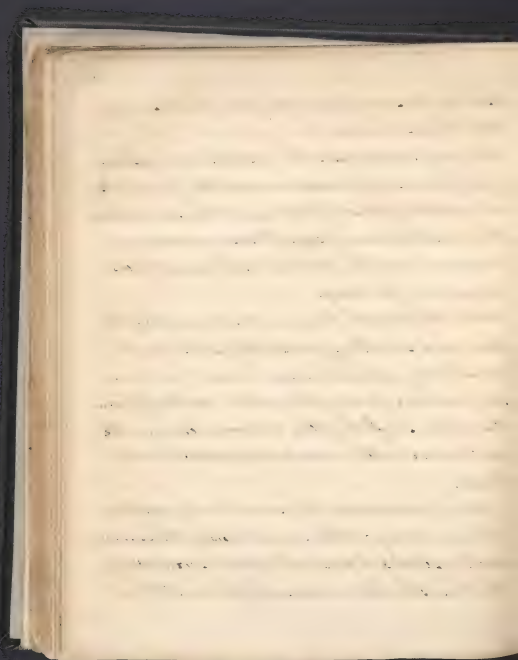


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discharge for some time after the febrile symptoms have subsided.

In very severe cases the vesicles early assume a gangrenous appearance, and the part falls into a state of mortification; at the same time the constitutional symptoms increase, coma comes on, and the patient is frequently destroyed in a few days.

When the disease terminates favourably, the fever and swelling gradually subside, the vesicles dry up, and become covered by a brown scab, and in a few days the cuticle scales off, from the whole surface of the tumour, leaving the part covered with a new cuticle, and extremely tender.

When we consider the similarity existing between many of the symptoms of Phlegmon and Erysipelas, it does not appear surprising, that one, should occasionally be mistaken,



for the other disease. They are both characterised by "unusual redness, heat, swelling and pain," and are frequently accompanied, by similar constitutional symptoms. The two diseases may in general however, by close observation, be easily distinguished.

In Phlegmon, the skin of the affected part is of a crimson red colour; whilst in Erysipelas, it is at first of a bright scarlet, but soon changes to a livid red or yellowish colour, and this redness disappears on pressure.

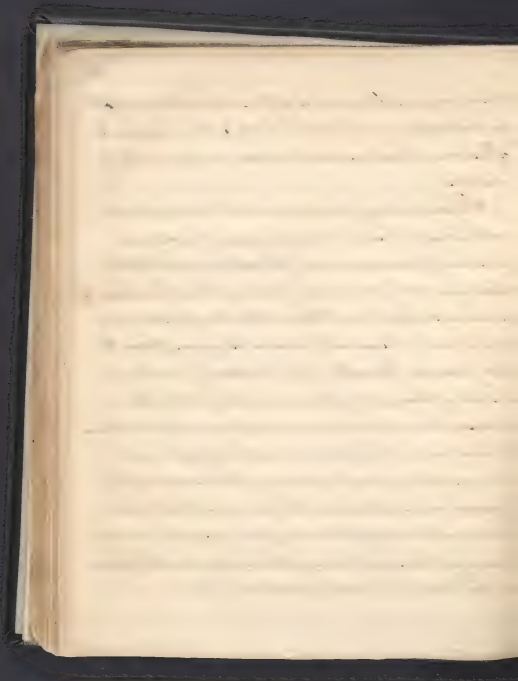
In Phlegmon the inflammation is commonly situated in the cellular membrane, is accompanied by an elevated and circumscribed tumour, and the effusion or secretion, which takes place, is generally of a purulent character, and contained in one circumscribed cavity.

In Erysipelas, the usual seat of the inflammation is, perhaps, the rete mucosum or cutis vera, the



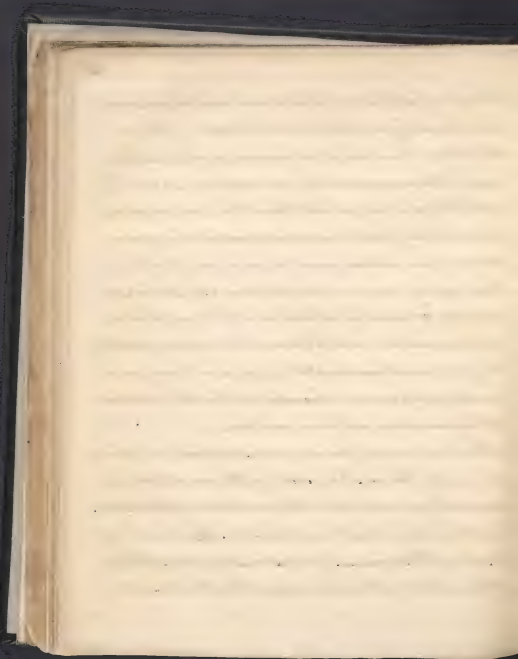
accompanying tumour is diffused, and but slightly elevated, and attended with a thin and acid effusion, which is contained in a number of vesicles.

Although every person is liable to be attacked with Erysipelas, it more frequently attacks persons of a sanguine or plethoric habit, than those of a delicate constitution; the debauchee is more subject to it than the temperate man, and it more frequently occurs to young, than to old persons. Agreeably to Dr. Buchan, females in a state of pregnancy are more subject to the disease, than when in an unimpregnated condition. It most frequently happens in autumn & spring, the changes of temperature during those seasons, being frequent and sudden; and the few cases that I have had an opportunity of observing, have generally assumed many of the symptoms of the disease, which happened at the time to be most prevalent.



The above facts prove beyond a doubt, that this disease is intimately connected, with the state of the constitution. Thus when two persons are exposed to precisely the same exciting causes, one is attacked with the disease, whilst the other does not experience the slightest inconvenience. For the same reason, if an intemperate person meet with a local injury, (as a wound or contusion) he is in consequence, frequently, attacked, with erysipelatous inflammation, whilst a similar injury, occurring to a person whose constitution is not impaired by intemperance or debauch, is followed by common phlegmonous inflammation.

There are many exciting causes, which, in conjunction with the existing state of the constitution, evidently contribute to the production of the disease, and though, in most instances it is practicable to discover these causes, we are in some cases, obliged to be content with a knowledge, that the disease



does exist. The principal of these exciting causes, as mentioned by different authors, are

1st Exposure to cold or damp air, particularly when in an unusual perspiration.

2nd. Being long exposed to the direct rays of the sun, the heat of a fire, or remaining too long in a warm bath.

3rd. Violent passions or affections of the mind, as anger, grief, fright. &c.

4th. Exposure to the action of one of the vegetable, animal, or mineral poisons; I have seen one case, apparently brought on, by the poison of the common Swamp Sumach.

5th. Local injuries as wounds and contusions, wounds of the scalp, even in the most perfect constitutions, are peculiarly liable to terminate in this variety of inflammation.

6th. Constipation, suppression of urine, or the interruption of any discharge that has been long

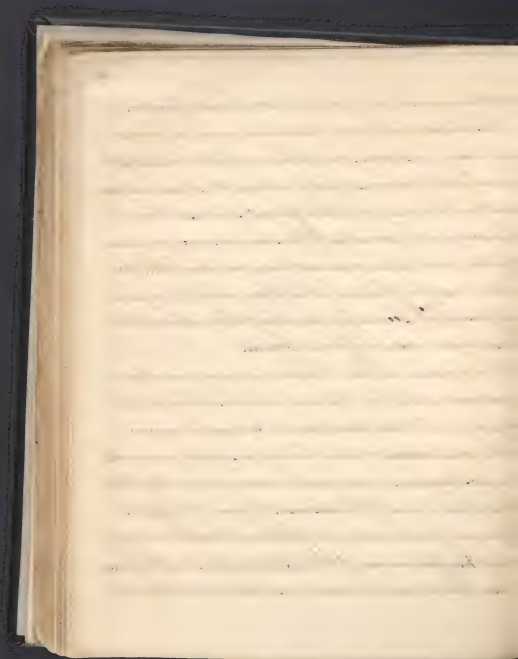
Handwritten text, likely a letter or document, written in cursive script. The text is faint and mostly illegible due to blurring. It appears to be a single page of writing, possibly a letter, with several lines of text visible. The ink is dark, and the paper is aged and slightly discolored. The handwriting is a cursive style, common in the 18th or 19th centuries. The text is arranged in a single column, with some lines starting with capital letters. The overall appearance is that of a historical document or a personal letter.

continued; as that from Hemorrhoids, issues, &c.

The disease does not pursue one uniform course in every instance, but like most other diseases, it is subject to various modifications; this has induced authors to divide it into different species. These are however, only varieties of the same disease, produced by the particular circumstances, in which the patient may be placed; but as these varieties require different ^{treatment}, it seems proper, that they should be described under different heads.

The division which I believe is now generally received is that of Pearson, who has divided the disease into Acute, Adumatus, and Malignant or Gangrenous.

The Acute Erysipelas, which I believe is synonymous with Erysipelas Polymorphus, occurs much more frequently than the other forms of the disease. It generally affects persons of a sanguine or plethoric habit, attacking the face, or one of the extremities. In the former case, the disease commences suddenly, with cold

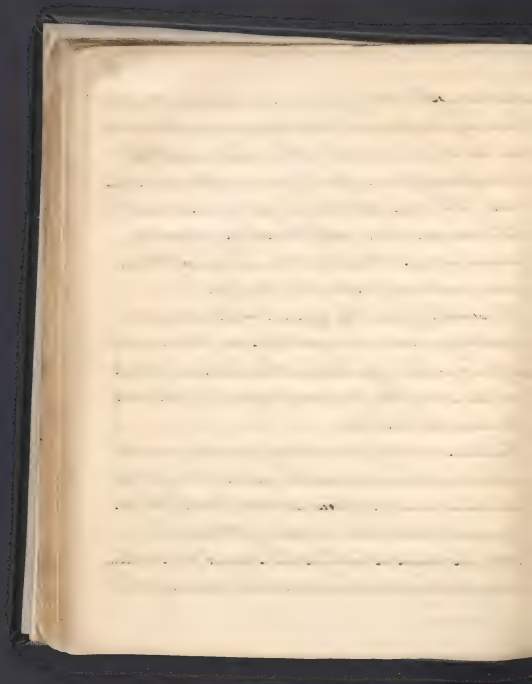


shivering, followed by fever, as described page 6, the pulse becomes full, frequent and hard, and on the second day the tongue is covered with a white crust; the patient complains of dull pains in the head and back of the neck, extending in some instances to the back and loins, great thirst, loss of appetite, general soreness, attended with a languid feeling, and a continual disposition to sleep.

The swelling generally appears on the second or third day, commencing at the side of the nose, the upper eye-lid, or far back on the cheek, and spreads over the side of the face, and frequently to the neck, the ear, and the scalp.

The face is now very much disfigured, the mouth is thrown to one side, and the eyelids of the affected side are so much swollen, as entirely to close the eye.

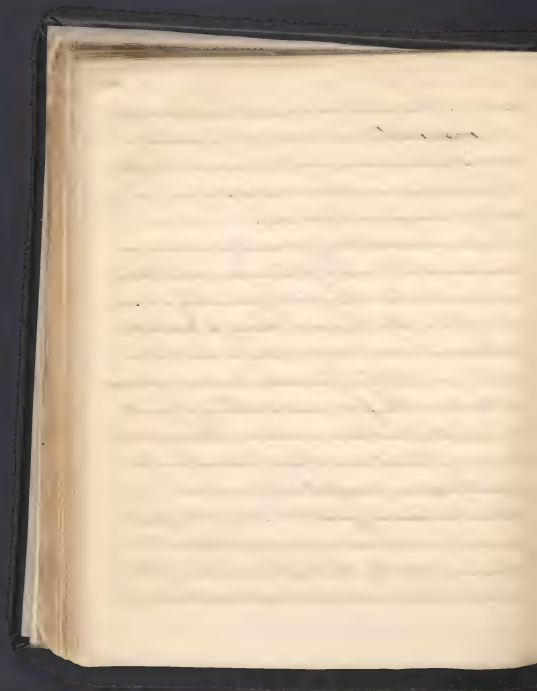
Generally about the fourth or fifth day, but in some instances as early as the second, the swelling is completely formed, and vesicles arise on different



parts of it. These vesicles are smaller than those attending erysipelas of the extremities; they generally burst spontaneously by about the second day after they arise, leaving the excoriated surface, covered with an irregular black scab.

The fever and swelling generally continue, accompanied at times by delirium, until the vesicles burst, when they both gradually subside, the colour of the tumour changes to a deeper yellow, or brown, and in a day or two the crusticle is completely separated. In some instances, at the time the fever and swelling begin to subside, the parotid and submaxillary glands become inflamed, and this inflammation frequently ends in painful suppuration.

When the disease affects both sides of the face, it generally commences on one, and extends to the other so gradually, that, by the time the inflammation has arrived at its height on this side, it



has entirely subsided in that originally affected.
 When the acute Erysipelas affects the lower extremities, it commences with nearly the same constitutional symptoms as when it is seated in the face; the redness and swelling do not appear quite so early in the disease, and have a more glossy appearance. The tumour is commonly situated on the fore part of the leg, extending from the ankle and sides of the foot, almost to the knee. In addition to the burning sensation felt in the variety just described, this tumour is accompanied by a most excruciating pain, especially during the night, and the sensibility is so great, that the slightest pressure cannot be made on the part, without occasioning pain. The vesicles are larger, and contain more fluid, than those situated on the face, and are very liable (especially in persons of intemperate habits) to degenerate into invitable ulcers. The febrile symptoms often continue for some



time after the swelling has subsided, whilst in other cases, the glands of the groin are secondarily affected with swelling and pain, but these generally subside without surgical interference.

When the hand and arm are affected, the constitutional symptoms, do not deviate materially from those already described; there is perhaps, in some instances, more nausea and vomiting.

The pain is generally first felt in one of the fingers, or the thumb, accompanied by swelling and redness; these gradually extend to the back of the hand, the wrist, and in some instances almost to the elbow.

The pain is very severe during the night, but in some measure subsides toward morning.

The disease in this instance is more tedious than when it affects the face, being sometimes ten or twelve days in arriving at its height.

Now that I have described the disease, only as terminating in vesication; but it frequently happens,



that the inflammation extends to the cellular membrane, and terminates in a tedious, and very painful suppuration; the impure pus which is secreted, infecting the adjacent cellular membrane, and separating the muscles from each other; the injury thus produced is sometimes very extensive, and if at this stage, the disease be neglected and suffered to proceed, hectic fever, and all its unpleasant consequences, will almost certainly be produced.

The Oedematous Erysipelas, is much less frequently met with in private practice than the acute, but it sometimes prevails extensively in crowded hospitals, appearing as an epidemic. In large and populous cities, it has also in some instances prevailed to a considerable extent.

It is very liable to affect old persons of delicate constitution, or persons whose constitutions have been weakened by intemperance or disease, ...



and generally, appears on the face, the breast, or extremities.

In the commencement of this variety, the symptoms are, neither so severe, nor so distinct, as those of the acute erysipelas. It commences with a sense of languor, debility, and sickness, but these symptoms are not generally, followed by a distinct chill.

The tumour has a livid red or yellow colour, and has a polished surface; it progresses more gradually, spreads to a greater extent, and is attended with less heat, than the swelling that occurs in acute Erysipelas. The vesicles which arise on the surface are small, and but slightly elevated.

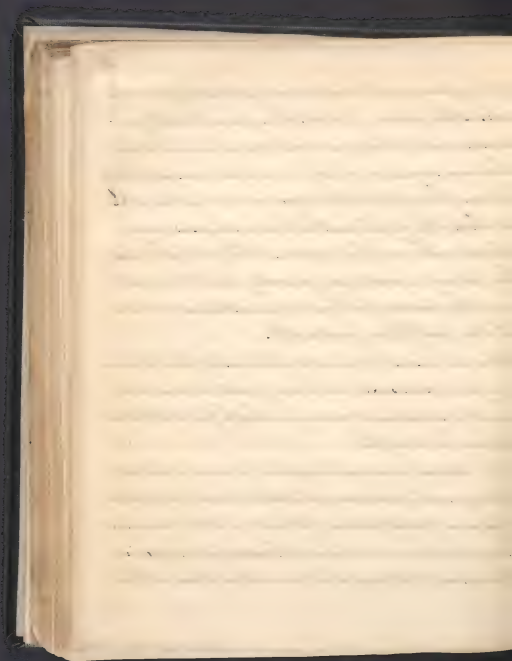
The constitutional symptoms at this stage of the disease, are very alarming; the tongue becomes covered with a white, or yellowish coat, the pulse is weak, frequent and often irregular, and the strength of the patient, very much depressed. Soon after the disease commences, an unpleasant



darting pain is felt in the head, extending down the neck; as the disease proceeds, this pain steadily, increases, until it becomes most excruciating, violent delirium comes on, which in severe cases is followed by coma, the vessels of the eyes become injected with red blood, the pupil in the latter stages is much dilated, with complete insensibility to light, and the patient is destroyed, generally about the ninth day of the disease, but in some instances not until the twelfth or fourteenth.

When the disease terminates favourably, the delirium and fever subside in a very gradual manner, and it is sometimes many weeks, before the patient recovers his strength.

The Malignant or pyæmic Erysipelas, like the variety last described, generally occurs in hospitals, or thickly populated cities, and attacks persons of delicate constitutions, and those that have been long labouring under some other disease. Its progress is more rapid than either

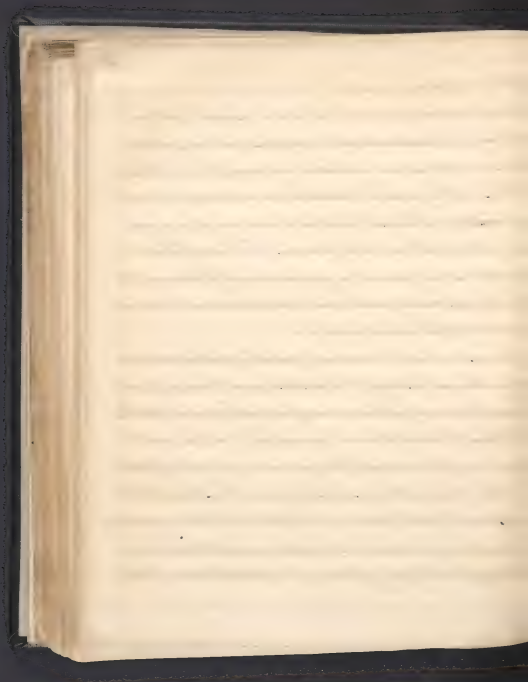


of the preceding varieties

In its commencement, it may resemble either the acute, or oedematous Erysipelas, but in general the symptoms more closely resemble the latter. The swelling exhibits a dark red colour, is soft and flaccid, and the vesicles which arise on its surface, are filled with a bloody serum. The bases of these vesicles soon assume a gangrenous appearance, the pulse is small, weak, and irregular, and tongue is covered with a brown fur.

In cases which terminate fatally, a delirium comes on in the early stages of the disease, and this, as in the oedematous variety, is followed in a few days by coma and death.

When the constitution is enabled to withstand the violence of the attack, the gangrene which appears at the base of the vesicles, frequently spreads to the adjacent parts, particularly the cellular membrane, producing extensive sloughing, and deep ulcerations. The injury is sometimes so extensive, that



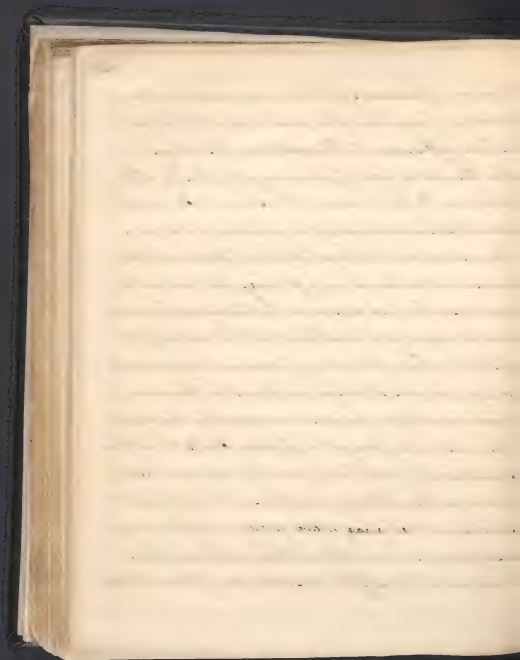
long stripes of dead, and detached, cellular membrane, may be drawn from under the integuments, leaving extensive sinuses; a continual irritation is thus kept up for several weeks, and if a judicious plan of treatment be not resorted to, hectic fever comes on, and the patient dies, as it were from the secondary effects of the disease.

When Erysipelas prevails as an epidemic; the swelling, in by far a majority of cases is located in some one particular part, but this is different, in different epidemics; thus, sometimes we have Erysipelas of the face; at other times it is confined to the extremities, and in some of the late periodical journals we have had accounts of epidemic Erysipelas, confined almost exclusively to the fauces. Some persons appear to remain peculiarly pre-disposed to relapses of erysipelas, for months after the severity of the disease has subsided. A case, very satisfactorily illustrating this position, and which



I had an opportunity of observing, occurred in the practice of my Reception, and valued friend, Dr. J. Spencer of Moorestown N^o Jersey.

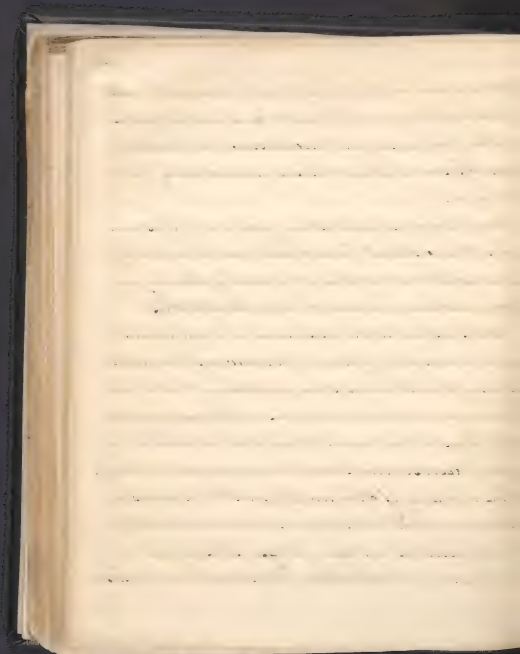
In the latter part of January, 1827, Mr. L. after exposure to the poison of the Swamp Sumach, was attacked with acute erysipelas of the face. By a strict antiphlogistic plan of treatment, the disease was subdued in a few days, but not until some vesicles had arisen, on the tumour; he continued to enjoy good health, until the latter part of April, when after a day of unusual exposure and fatigue, he was attacked in precisely the same manner as before; he was immediately bled about ℥xvj , and freely purged by Epsom Salts; cloths thick spread with fresh lard, were applied over the tumour; on the following day the swelling began to subside, and in a day or two more, had entirely disappeared. Since April, this gentleman has had two returns of the disease; one of these attacks



commenced on the 26th of July, the other on the 28th of October; they were both mild, and readily yielded to the treatment just mentioned; each attack was less severe, than the one immediately preceding it.

One of the most interesting features of this case was, the distinct periodical form which it assumed, three months (very nearly) having in every instance elapsed, between the attacks.

With respect to the treatment of Erysipelas, a great diversity of opinion, has always prevailed among practitioners, some contending that it was purely an inflammatory disease, requiring an-
 tiphlogistic treatment; others that it was an ematig-
 nant disease, and should be managed accordingly. This diversity of opinion, appears to have arisen from a neglect to distinguish between the different varieties, or stages, of Erysipelas, or from a propensity which many Physicians have possessed,



to prescribe for the names, rather than the symptoms, of a disease. When we consider the different, and indeed opposite symptoms, which attend the different varieties of Erysipelas, or the same variety in its different stages, it must be evident, that they will require very different treatment.

In the treatment of acute Erysipelas, the indication which first naturally presents itself, is to diminish, or subdue, the inflammatory action: When the pulse is full and hard, (and this is almost invariably the case) venesection is always proper, and it is frequently necessary, to repeat this operation, to a very considerable extent. With respect to the quantity of blood to be drawn however, we must not be governed by the pulse alone, but with reference to the constitution, age, and general habits of the patient, to the situation in which he may be placed, and, to the prevailing type of disease: After the bleeding, a gentle emetic may be given to evacuate the stomach, and



produce a determination to the surface; this determination to the surface, should be kept up through the whole course of the disease, by the exhibition of diaphoretic medicines, as Tartarized Antimony either alone, or combined with Nitrate of Silver or Calomel, the Pulvis Doveri, or Saline Draught; these to be given in small doses, and repeated every hour or two, agreeably to circumstances. When the heat and irritation, are very great, the Dover's powder will be found a very appropriate diaphoretic; the opium which it contains, tending to allay this irritation. Some mild cathartics, such as calomel, followed by Epsom salts or Oil Ricini, may be given as occasion may require, and during the operation of this medicine, the diaphoretic should, of course, be omitted.

The patient's chamber should be kept at a moderate temperature, and well ventilated, his food should be of the lightest kind, consisting of Tapioca, panada, rice &c. with small quantities of ripe fruits. Lemon-ade, and other acidulated and cooling drinks, may



be freely indulged in. Animal food of every description, and all spirituous, and fermented liquors, should be positively forbidden.

Numerous local applications have been proposed for the cure of Erysipelas, each of which has had many advocates and opposers; the narcotic applications, were condemned by many, because they were supposed to produce gangrene; the spirituous, as increasing the inflammation; and the oleaginous, aqueous, and emollient, as protracting the disease, and causing the swelling to spread; it was indeed reduced almost to an axiom among physicians, that "no grease should touch an erysipelatous tumour," and consequently the dry, glarinnaceous, or absorbent articles, were almost the only topical applications.

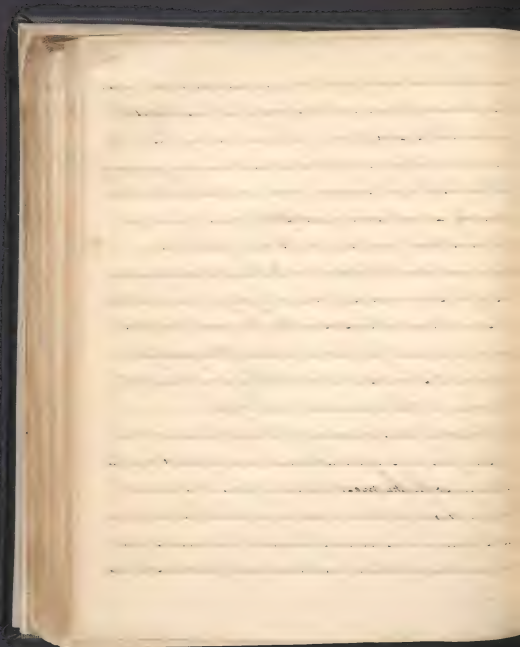
These false theoretical notions, have however, been obliged to yield, to practice and observation, and the different oleaginous preparations, are at present almost exclusively employed. Of these, the principal

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are the mercurial ointment, and common lard. The former of these articles was first used in 1717 by Des Lisle, and Dean, of Chambersburg, Pa. and the example of these gentlemen, has been very generally followed. It has however been contended, that the remedy is exclusively indebted for its efficacy, to the lard that enters into its composition.

I am not about to decide as to the comparative merits of these remedies; I can only say, I have certainly seen them both used with the most decided advantage; in the present state of the question however, I should undoubtedly give the preference to the mercurial ointment.

To prevent the spreading of the inflammation a blister has in some instances been applied over the tumour, with the most happy effect. As a general rule, a blister applied to an erysipelatous tumour, will require considerably longer to produce its effect, than when applied under ordinary circumstances,



inasmuch as the morbid action of the part, must at
-ways be subdued, before the specific action of the blis-
-ter, can be induced.

In the Philadelphia Medical and Physical Journal
for November 1825 page 139-40 Dr. Howell, of Woodbury
New Jersey, speaks in the highest terms of the decoction
of cantharides in spts. of turpentine, as a topical
application, in Erysipelas. He directs lint, or soft
muslin, to be thoroughly wet with the saturated
decoction, diluted with an equal quantity of Sweet
oil, and bound on the inflamed surface, and the
dressing to be renewed in four or six hours.

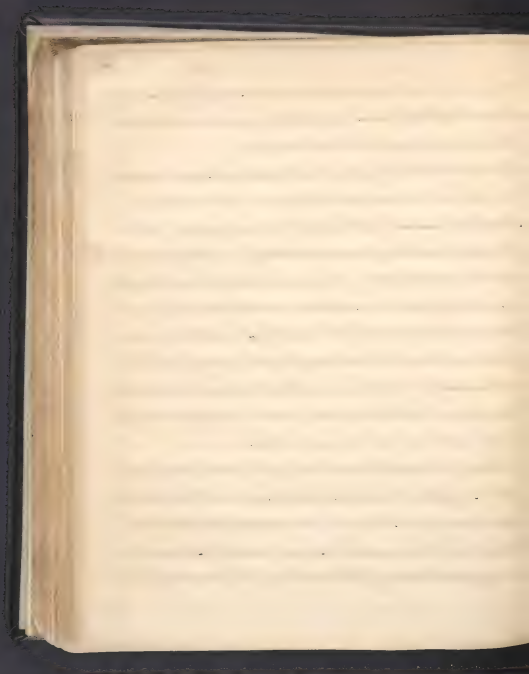
Speaking of this remedy the Doctor says "in no case
that I now recollect, where it was thoroughly ap-
-plied, has it failed to arrest the disease, in twenty
four hours." If such be the fact (and the character
of Dr. H. is sufficient to vouch for its authenticity) this
is certainly an invaluable article. But how shall
we reconcile this remedy with the fact, that the



mercurial ointment, prepared as it sometimes is with
 oleum Terebinthina, is invariably injurious when ap-
 plied to an erysipelatous tumour?

If, notwithstanding our exertions, the disease runs on
 to suppuration, as described page 12, a free incision
 should be made in the most depending part of the
 tumour, and the pus evacuated; firm pressure should
 now be instituted on the part, so as to place the op-
 posite surfaces of the sinus in contact, and thus give
 them an opportunity to unite, by the adhesive in-
 flammation. If the disease has been suffered to pro-
 ceed until great debility, or hectic fever, is produced,
 the strength of the patient must be supported by
 a generous diet, porter, wine, bark &c.

Most of the authors who have divided Erysipelas
 into its different varieties, condemn bloodletting in the
 nodular form. I am by no means prepared to
 prove that this verdict is not correct, especially
 as my opportunities of observation in this variety have



been extremely limited; but so far as the observation of one very distinctly marked case, will warrant an opinion, I am strongly inclined to believe, that in the very first stages, of the disease, venesection cautiously practised, would prove not only a safe, but a ~~very~~ useful remedy.

It rarely however becomes the duty of the Physician to bleed, for as the symptoms in the commencement are not very alarming, to an inexperienced observer, he is not called on, until the disease has made some progress, and then it would doubtless be improper.

Although at this stage venesection would be improper, the mild purgative medicines may be safely administered, but the greatest care should be taken, that they do not operate too freely, and thus exhaust the patient. Such diaphoretic medicines as allay pain, and irritation, at the same time that they exercise their specific influence, may be given agreeably to circumstances.



If any symptoms of affection of the brain be observed, blisters should be immediately applied on the back of the neck, and behind the ears, and cups or leeches to the temples; if these do not afford relief, blisters should also be applied to the extremities, and bladders filled with ice, to the top of the head.

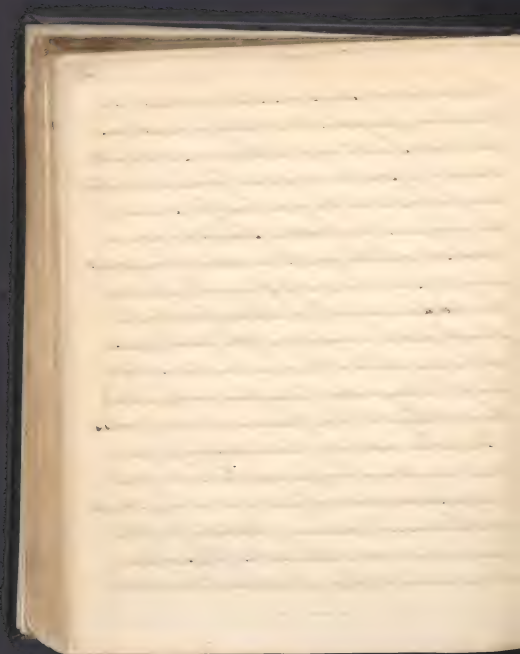
When the system appears very much exhausted, and the tumour becomes flaccid, and assumes a gangrenous appearance, the bark of cinchona, with wine, sulphate of quinine, camphor, carbonate of ammonia &c. should be freely administered, and a blister, or terebinthinate decoction of cantharides, should be applied to the tumour.

Inasmuch as the gangrenous variety generally occurs in impaired constitutions, the necessity or propriety of venesection, will be comparatively rare. There are however some cases, attended with a full, hard, pulse, hot skin, and every symptom of inordinate inflammatory action, at the same time



that the tumour shows irresistible evidences, of approaching gangrene. Under these circumstances, the lancet should undoubtedly be resorted to, with a view to lessen the inordinate febrile action, which may be considered, the most fruitful source of the gangrene. The bleeding should however be practised with the greatest caution, taking small quantities at a time, and frequently repeating the operation, carefully watching the pulse, the strength, and the countenance of the patient; moderate purging, should at the same time be resorted to, and all heating, or stimulating food avoided; in short, the antiphlogistic plan of treatment should be practised.

But, when instead of the above symptoms, we find a small and very frequent pulse, haggard or depressed countenance, great prostration of strength, and the tumour becoming flaccid, of a purple colour, and covered with vesicles filled with a bloody serum, a plan of treatment directly the

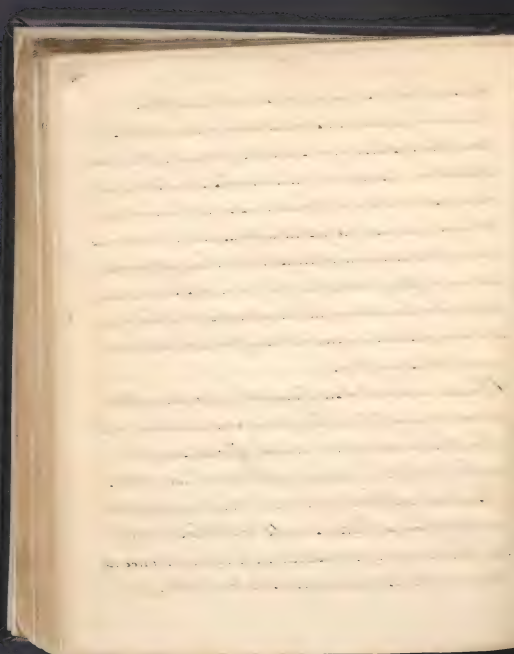


reverse of that just laid down, should be adopted.

Our whole attention, should now be directed to support the system, and stop the progress of the mortification. Bark, and other tonicks, should be freely administered, the diet should consist of the most nutritious and easily digested articles, with porter and wine. But as a pure stimulant, nothing appears to me more appropriate, than the carbonate of ammonia, prepared as directed in the Therapeutics of Dr. Chapman, and administered in quantities, appropriate to the urgency of the symptoms.

Opium in small doses frequently repeated, will be found very useful to allay pain and irritation, and where the nerves appear much affected, camphor might perhaps be advantageously combined with it.

As a local application to arrest the progress of the mortification, a blister should be applied directly over the tumour, and extending to some distance on the sound parts adjoining; or the terebinthinate



decoction should be used as before directed; it is to this, and the preceding variety of Erysipelas, that this article appears to me, peculiarly, applicable.

After the progress of the mortification has been arrested, emollient poultices may be applied, to facilitate the separation of the sloughs. When from the mortification attacking the cellular membrane, extensive sinuses are formed under the integuments, mild poultices should be applied, until the sloughs are completely detached. Throughout this process, and indeed, until the sinuses have entirely healed, it will generally be found necessary, to support the system by a generous diet, wine, &c.

As soon as the sloughs are completely detached, they should be removed, and firm and equable pressure made on the part, by means of compress and roller, or adhesive straps.

If after persevering in this plan for a considerable time it is found insufficient, some moderately

stimulating liquid, such as wine, tincture of myrror,
or even a weak solution of corrosive sublimate, may
be injected into the sinus, or a silver probe dipped
in Nitric acid, as practised by Dr. Dorsey, may be
passed over the surface of the sinus, after which
the pressure should be removed.

If all this be found insufficient, and the sinus
be not too deep and extensive, it should be laid
open from end to end, and the cavity freely ex-
posed to the action of the air; the surface should
now be covered with dry lint, which will pro-
duce slight irritation, and in a short time heat-
thy granulations, will shoot up from the bottom.

